Mundell
Consulting Professionals
for the Earth and the Environment

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May 31, 2012

Ms. Carmen Anderson
Indiana Department of Environmental Management
Office of Land Quality – Voluntary Remediation Program
100 North Senate Avenue
Indianapolis, Indiana 46204

Re: Notification of Additional Soil and Groundwater Investigation Activities
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No. M01046

Dear Ms. Anderson:

MUNDELL & ASSOCIATES, INC. (MUNDELL) is pleased to submit this notification of additional soil and groundwater investigation activities to the Indiana Department of Environmental Management (IDEM) for the Michigan Plaza Site located at 3801 – 3823 West Michigan Street in Indianapolis, Indiana. This scope of work was previously summarized in the *Response to IDEM's Request for Revised Remediation Work Plan Approval Review and Technical Response to General Notice of Potential Liability Review* document dated March 16, 2012.

MUNDELL is planning to install two additional monitoring wells south and southeast of the Michigan Plaza property to further delineate perchloroethene (one shallow well to the south of MMW-P-11S/DR along the eastern edge of the Floral Park Cemetery; anticipated "MMW-C-16S") and vinyl chloride (one deep well to the southeast of MMW-P-9D in the Floral Park Cemetery in the vicinity of soil boring GP-23; anticipated "MMW-C-17D"). These wells will also allow enhanced monitoring of the continuing remediation activities at the Plaza.

WORK SCOPE

Task 1 – Soil Boring Advancement

Two (2) soil borings will be advanced during this mobilization. Prior to the field activities, MUNDELL will notify Indiana Underground Plant Protection Service (IUPPS) to schedule a public utility locate. Additionally, MUNDELL will perform a private locate using ground penetrating radar.

Each soil boring will be cleared for utilities to a depth of five feet below ground surface (ft-bgs) utilizing a hand auger. Following utility clearance, a Geoprobe® direct-push unit will be utilized to advance the soil borings. Soil samples will be collected continuously during each boring and the samples classified by a MUNDELL scientist. One (1) soil boring will be advanced to an anticipated depth of 30 ft-bgs (MMW-C-16S) while the second soil boring will be completed to an anticipated depth of approximately 40 ft-bgs (boring MMW-C-17D), or until the basal till unit is encountered. A photo-ionization detector will be used to screen soil samples for total photo-ionizable vapors (TPV). Soil samples with elevated TPV readings will be retained for laboratory analysis. Should no TPV be indicated during field screening activities, two soil samples from each location will be submitted for laboratory analysis, one from immediately above the saturated zone and one from the base of the soil boring.

Soil samples submitted for volatile organic compound (VOC) analysis will be collected utilizing the United States Environmental Protection Agency (U.S. EPA) SW-846 collection method 5035. Soil cuttings will be containerized in 55-gallon DOT drums, labeled properly and disposed of appropriately.

All field procedures, including soil boring advancement, soil sampling, screening and classification, monitoring well installation and groundwater sampling and testing, will be completed in accordance with current IDEM protocols. Selected soil samples will be submitted to Pace Analytical Laboratories (Pace) in Indianapolis, Indiana, for analysis of VOCs utilizing U.S. EPA SW-846 Test Method 8260, and for foc analysis utilizing the Walkley-Black Method.

Task 2 – Monitoring Well Installation

Deep monitoring well **MMW-C-17D** will be installed at the base of the aquifer unit. The five-foot screened interval will extend to the aquifer/till interface. This location will monitor conditions in the deep aquifer interval.

The shallow monitoring well will be installed midway between MMW-P-11S/DR and Cossell Road and utilize a 10-foot screen located within the appropriate depth interval to monitor the upper saturated zone of the aquifer.

The monitoring wells will be constructed of two-inch diameter, flush-joint, threaded Schedule 40 PVC materials and the screen will be constructed using 0.010 inch machine-slotted PVC. A sand filter pack, consisting of No. 4 sand, will be installed around the bottom of each screen to a height of approximately one to two feet above the top of the screen. Bentonite chips will be placed into the annular space around the riser and hydrated to create a seal to near the ground surface. The monitoring wells will be finished with a flush-mounted, bolt-down steel manhole cover set in place with a concrete pad to provide protection and stability to the wells. The wells will be properly developed in order to clean the well and screen pack of silt and debris. The well will then be fitted with a watertight well cap to prevent the infiltration of surface water.

Following installation and development, the monitoring wells will be surveyed into the existing monitoring well network prior to Third Quarter 2012 groundwater sampling activities. All development water generated during these investigation activities will be stored in 55-gallon DOT drums, labeled properly, and will be removed from the Site promptly to be disposed appropriately.

SCHEDULE

The additional soil and groundwater investigation activities described above are scheduled to begin on **Monday, June 4, 2012**.

We appreciate the opportunity to update IDEM on the soil and groundwater investigation activities upcoming at the Site. If you have any questions, please do not hesitate to contact us at (317) 630-9060 or via email (jmundell@MundellAssociates.com; swebb@MundellAssociates.com).

Sincerely,
MUNDELL & ASSOCIATES, INC.

Mark E. Breting

Mark E. Breting, L.P.G.
Senior Project Geologist

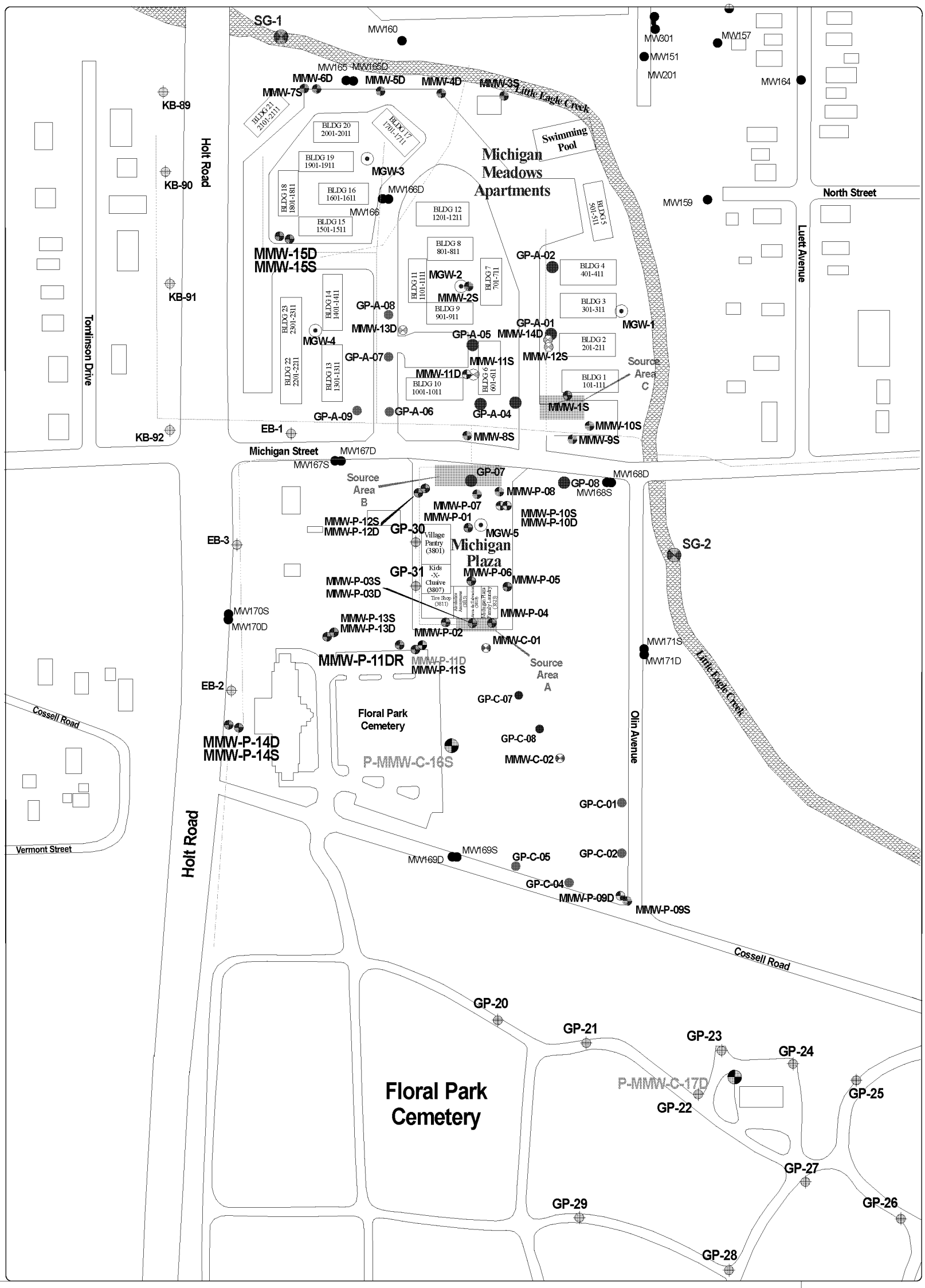
John A. Mundell

John A. Mundell, P.E., L.P.G.
President/Senior Environmental Consultant

/meb

Attachments: Figure 1

cc: Shelly Lam, U.S. EPA
Bruce George, Buchanan Group - Floral Park Cemetery



LEGEND

	Fence
MW160	Keramida/Environ Monitoring Wells
MMW-P-06	MUNDELL Monitoring Wells, Michigan Plaza (September 2005)
MMW-P-07	MUNDELL Monitoring Wells (January 2007)
MMW-P-09D	MUNDELL Monitoring Wells (May-June 2007)
MMW-C-01	MUNDELL Monitoring Wells (July/August 2008)
MMW-11S	MUNDELL Monitoring Wells (November/December 2008)
GP-C-05	MUNDELL Soil Boring Locations (January 2007)
GP-07	MUNDELL Soil Boring Locations (September 2005)
GP-C-08	MUNDELL Soil Boring Locations (August 2008)
MMW-P-11D	MUNDELL Monitoring Wells (September 2011)
MGW-1	MUNDELL Soil Gas Well
P-MMW-P-14D	Planned Monitoring Well Location
MMW-P-11D	Abandoned Monitoring Well Location
EB-2	Environ Soil Borings
	Sanitary Sewer
	Storm Sewer

NORTH

SCALE 0 200 feet

Keramida Monitoring Well Locations Referenced from Keramida Environmental, Inc.
Project No. 2829
March 13, 2002

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Project Number:	M01046
Drawing File:	PropLoc 11.2011.skf
Date Prepared:	11/28/2011
Scale:	1"=200'

Planned Additional Investigation Activities

Michigan Plaza
3801 - 3823 West Michigan Street
Indianapolis, Indiana

FIGURE
1